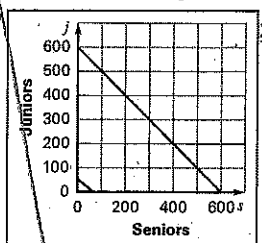


Lesson 3.2

Teaching Guide

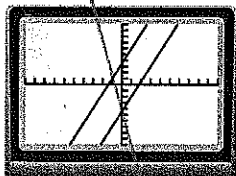
1. $y + s = 600$; $15j + 12s = 800$;



2. difficult; hard to read the exact numbers from the graph

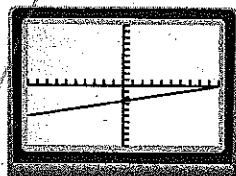
Investigating Algebra Activity

1.



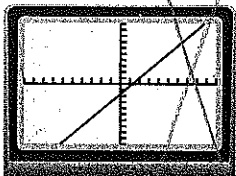
no solutions

2.



infinite number of solutions

3.



infinite number of solutions

4. parallel 5. In the example, if you multiply the coefficients of x and y by 3 in the first equation, the result will be the coefficients of x and y in the second equation. In Exercise 1, if you multiply the coefficients of x and y by 4 in the first equation, the result will be the coefficients of x and y in the second equation. There is no relationship between the constants.

6. coinciding lines 7. In Exercise 2, if you multiply the first equation by 2, the result will be the second equation. In Exercise 3, if you multiply the first equation by -1.5 the result will be the second equation.

8. A linear system of parallel lines has no solution. A linear system of coinciding lines has an infinite number of solutions.

Practice Level A

1. (2, 2) 2. (1, 3) 3. (-1, -2) 4. (4, -2)
5. (3, -4) 6. (-3, 2) 7. $(\frac{1}{2}, \frac{3}{4})$ 8. $(\frac{22}{3}, -\frac{5}{3})$

9. $(-\frac{5}{4}, -\frac{3}{4})$ 10. (0, 1) 11. (2, 2) 12. (6, -8)

13. (1, 2) 14. $(\frac{9}{4}, 2)$ 15. (20, 5) 16. (5, -1)

17. (-2, -3) 18. (5, 4) 19. (8, 2) 20. (0, 0)

21. (-4, 7) 22. $(-\frac{3}{11}, -\frac{8}{11})$ 23. $(\frac{5}{9}, \frac{4}{3})$

24. $(\frac{1}{25}, \frac{18}{25})$ 25. $(\frac{12}{7}, 4)$ 26. $(-\frac{1}{2}, 1)$ 27. $(1, \frac{7}{3})$

28. 68 29. 2 large, 2 medium

Practice Level B

1. (2, 2) 2. (3, 0) 3. (2, -1) 4. $(\frac{9}{4}, \frac{1}{2})$

5. $(\frac{2}{3}, -2)$ 6. (-1, 5) 7. (2, 3) 8. (-1, 4)

9. (-16, -5) 10. $(\frac{1}{2}, 2)$ 11. $(-\frac{4}{5}, \frac{17}{10})$

12. (0, -2) 13. (1, -1) 14. (-2, 1)

15. no solution

16. $(-\frac{13}{2}, -7)$ 17. (16, 6) 18. $(\frac{2}{7}, -\frac{1}{7})$

19. infinitely many solutions 20. $(\frac{23}{13}, -\frac{18}{13})$

21. (6, -12) 22. 1992 23. 60 of type A, 24 of type B 24. you: 8 h, your sister: 6 h

Practice Level C

1. (4, -3) 2. (-6, 9)

3. infinitely many solutions

4. infinitely many solutions 5. (-3, 7)

6. $(\frac{5}{3}, \frac{1}{2})$ 7. (3, -4) 8. no solution

9. (1, -2) 10. (5, 3) 11. (6, 2) 12. $(\frac{3}{4}, -\frac{1}{3})$

13. (10, 10) 14. (5, 4) 15. $(\frac{17}{7}, \frac{9}{7})$

16. no solution 17. $(\frac{14}{3}, 0)$ 18. (2.4, 1.8)

19. 1876 20. \$20.00 21. $a = 2, b = 3$

Study Guide

1. (2, 0) 2. (3, -1) 3. (4, 2) 4. (-1, 1)

5. (6, 3) 6. (2, 1) 7. infinitely many solutions

8. no solutions 9. no solutions

Real-Life Application

1. $t + 3c = 10$ 2. $5t + 10c = 50$

3. 0 canoes, 10 tubes 4. $2b + w = 10$